As stated in MPEP §§ 2142-2143.01, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Independent claims 1 and 3 recite that an area of a mask is at most 15% or 35% of an area of a substrate. As a result of this feature, stable doping without a drastic pressure change in a treatment chamber can be realized by reducing degasification of a resist during doping, as shown, for example, in Figures 1 and 2 and page 8, line 7 to page 9, line 20 of the present specification. For the reasons provided below. Taft does not teach or suggest the above-referenced features of the present invention.

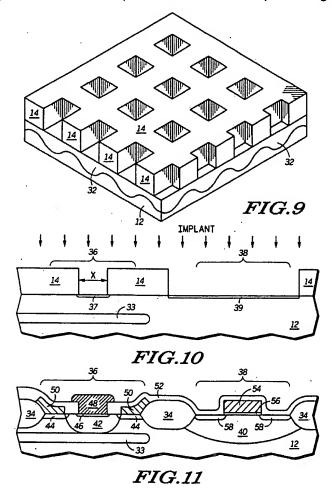
The Official Action concedes that "Taft et al. fails to consider an area of the mask is at most 15% (or 35% in re clm. 3) of the area of the substrate" (page 3, Paper No. 08162005). The Official Action cites column 4, lines 1-15 of Taft and asserts that "it would have been obvious to a person of ordinary skill in the art at the time of the

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invention to modify Taft et al. to include the idea of optimizing high or low masking percentages versus depth, in order to teach the specific percentage needed for a particular desired implant depth" and that "any shallow junctions or deep implants could be made more reliably, based on mask area (Col. 4 lines 1-25)" (Id.). However, the Official Action has not shown that Taft should be modified such that an area of a mask is necessarily at most 15% or 35% of an area of a substrate.

Taft appears to be concerned with forming wells and adjusting a masking layer 14 and a junction depth for each well (as shown, for example in Figures 9-11).

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However, Taft is not concerned with masking an area of a substrate, much less that an area of the mask is at most 15% (35%) of an area of the substrate. As noted above, this feature is important because stable doping without a drastic pressure

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change in a treatment chamber can be realized by reducing degasification of a resist during doping. On the other hand, Taft does not teach or suggest that an area of a resist mask has anything to do with a problem of reducing degasification.

Furthermore, the Applicants respectfully submit that the Official Action is applying an improper "obvious to try" rationale in support of the alleged obviousness rejection. Specifically, Taft does not give an indication that an area of the mask with respect to an area of a substrate is critical. Also, Taft does not teach or suggest a direction as to which of many possible choices is likely to be successful. (See MPEP § 2145.X.B.) Therefore, the Applicants respectfully submit that Taft does not teach or suggest that Taft should be modified such that an area of a mask is necessarily at most 15% or 35% of an area of a substrate.

Since Taft does not teach or suggest all the claim limitations, a prima facie case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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